

## **ABSTRACT OF THE DISCLOSURE**

615 The present invention provides a large communication network suitable for nationwide or worldwide utilization. A plurality of area code nodes are connected with all-fiber-optic links with all-optical switches. A routing algorithm provides one or more communication links from each area code node to every other area code node so that information never has to change carrier wavelength as it travels the network. Each area code node contains circuits that are provided to connect individual users to the network.